



# TRANSMITTAL FORM

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| Application No.                          | 10/665,515         |
| Filing Date                              | September 16, 2003 |
| First Named Inventor                     | Takashi Matsuoka   |
| Art Unit                                 |                    |
| Examiner Name                            |                    |
| Total Number of Pages in This Submission | 20                 |
| Attorney Docket Number                   | 96790P439          |

## ENCLOSURES (check all that apply)

|  |   |  |
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| Remarks  |   |  |

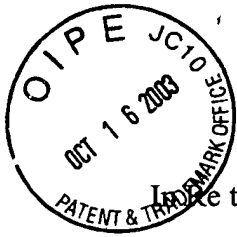
## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

|                         |  |
|-------------------------|--|
| Firm or Individual name | Eric S. Hyman, Reg. No. 30,139<br>BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP |
| Signature               |  |
| Date                    | 10/10/03   |

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| Signature             |               | Date | 10/10/03 |



Docket No.: 96790P439

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

TAKASHI MATSUOKA, ET AL.

Application No.: 10/665,515

Filed: September 16, 2003

For: SEMICONDUCTOR OPTICAL MODULATOR AND LASER  
WITH OPTICAL MODULATOR

Art Group:

Examiner:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97**

Commissioner for Patents  
P.O. Box 1450  
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In accordance with the duty of disclosure, enclosed is a copy of Information Disclosure Statement by Applicant (form PTO/SB/08), which is being submitted within three (3) months of filing of the application. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

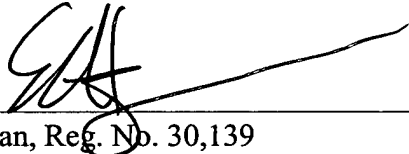
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Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP


Date: \_\_\_\_\_

10/10/03

  
Eric S. Hyman, Reg. No. 30,139

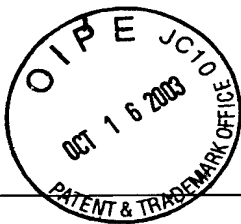
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PTO/SB/08A (modified)

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| Substitute for form 1449A/PTO<br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><i>(use as many sheets as necessary)</i> |   |    |   | <b>Complete if Known</b> |  |
|   |   |    |   | Application Number       |  |
|   |   |    |   | Filing Date              |  |
|   |   |    |   | First Named Inventor     |  |
|   |   |    |   | Art Unit                 |  |
|   |   |    |   | Takashi Matsuoka         |  |
|   |   |    |   | Examiner Name            |  |
| Sheet   | 1 | of | 1 | Attorney Docket Number   |  |

| U.S.PATENT DOCUMENT   |                          |                 |   |                                |  |
|-----------------------|--------------------------|-----------------|---|--------------------------------|--|
| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number |   | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant<br>of Cited Document |
|                       |                          | Number          | Kind Code <sup>2</sup><br><i>(if known)</i> |                                |  |
|                       |                          | US 5,923,688    | JP  | 07-13-1999                     | NEC Corporation                                    |
|                       |                          | US              |   |                                |  |
|                       |                          | US              |   |                                |  |
|                       |                          | US              |   |                                |  |
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|                       |                          | US              |   |                                |  |

| FOREIGN PATENT DOCUMENT |                          |                              |                     |  |                                |   |                         |
|-------------------------|--------------------------|------------------------------|---------------------|--|--------------------------------|---|-------------------------|
| Examiner<br>Initials*   | Cite<br>No. <sup>1</sup> | Foreign Patent Document      |                     |  | Publication Date<br>MM-DD-YYYY | Name of Patentee<br>or Applicant of<br>Cited Document | Tranlation <sup>6</sup> |
|                         |                          | Country<br>Code <sup>3</sup> | Number <sup>4</sup> | KindCode <sup>5</sup><br><i>(if known)</i> |                                |   |                         |
|                         |                          | JP                           | 08-086978           | A  | 04-02-1996                     | NTT CORPORATION                                       | ABST                    |
|                         |                          | JP                           | 10-294532           | A  | 11-04-1998                     | TOSHIBA CORP  | ABST                    |
|                         |                          | JP                           | 2002-176196         | A  | 06-21-2002                     | NGK INSULATORS LTD                                    | ABST                    |
|                         |                          |                              |                     |  |                                |   |                         |
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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP901.04 or in the comment box of this document. <sup>3</sup>Enter office that issued the document, by the two-letter code (WIPO Standard ST.3) <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.



PTO/SB/08B (modified)

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|   |   |    |   | Art Unit                 |  |
|   |   |    |   | Examiner Name            |  |
| Sheet   | 1 | of | 1 | Attorney Docket Number   |  |

| OTHER PRIOR ART–NON PATENT LITERATURE DOCUMENTS |                          |  |                          |
|---|--------------------------|--|--------------------------|
| Examiner<br>Initials*                           | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium catalog, etc.), date, page(s), volume–issue number(s), publisher, city and/or country where published. | Translation <sup>2</sup> |
|   |                          | Bernardini et al., "Spontaneous polarization and piezoelectric constants of III–V nitrides", Phys. Rev. B, 56 (1997) R10024  |                          |
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|   |                          | Puychevri et al., "Synthesis of III–V semiconductor nitrides by reactive cathodic sputtering", Thin Solid Films, 36(1976)141   |                          |
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|   |                          | Matsuoka et al., "Wide–Gap Semiconductor (In, Ga) N", International Symposium on GaAs and Related Compounds, (Karuizawa, Japan, 1989); in Inst. Phys. Conf. Ser., 106. pp. 141 – 146   |                          |
|   |                          | Matsuoka, "Phase Separation in Wurtzite In <sub>1-x-y</sub> Ga <sub>x</sub> Al <sub>y</sub> N", MRS Internet J. Nitride Semicond. Res. 3,54(1998)  |                          |
|   |                          | Matsuoka et al., "OPTICAL BANDGAP ENERGY OF InN", Extended Abstracts(the 36 <sup>th</sup> Meeting,); The Japan Society of Applied Physics and Related Societies, pp. 270 (1p–ZN–9) (1998)  |                          |
|   |                          | Matsuoka et al., "OPTICAL BANDGAP ENERGY OF InN", Extended Abstracts(the 49 <sup>th</sup> Spring Meeting, 2002); The Japan Society of Applied Physics and Related Societies, pp. 392 (29p–ZM–1)  |                          |
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